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Introduction

The buying and selling of cars online has seen an increasing trend. This is due to many benefits to both buyers and sellers such as convenience, expanded reach and transparency. On top of that, auctions are a good platform for the sale of automobiles as it reflects the market demand and can determine a fair market value. Sellers are also able to maximise their profit by putting their car up for auction under favourable market conditions. Lastly, auctions create an engaging and interactive experience that attract buyers.

Objective

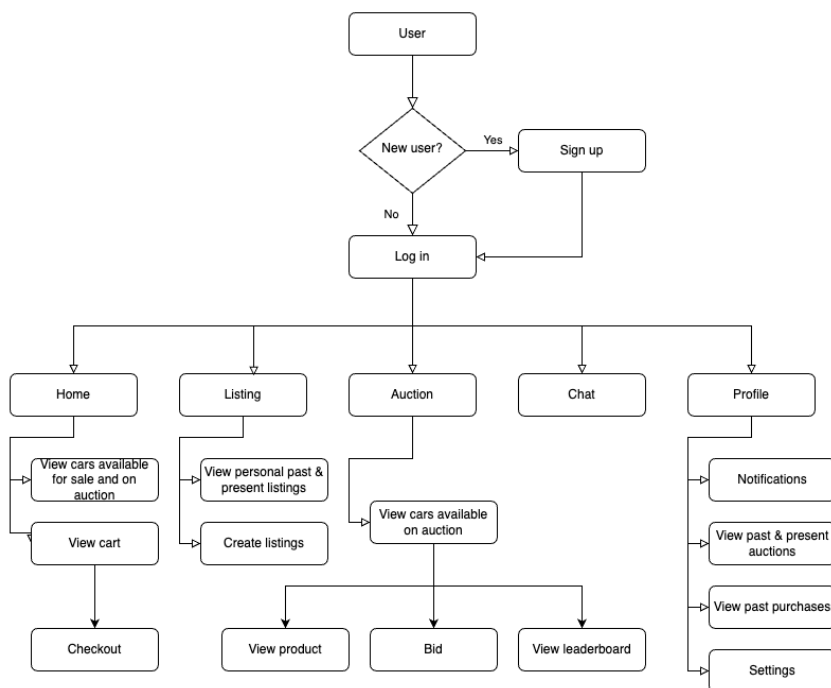
Our aim is to create an application with buying, selling and auction of cars without going through a third-party salesperson.

Technology Stack



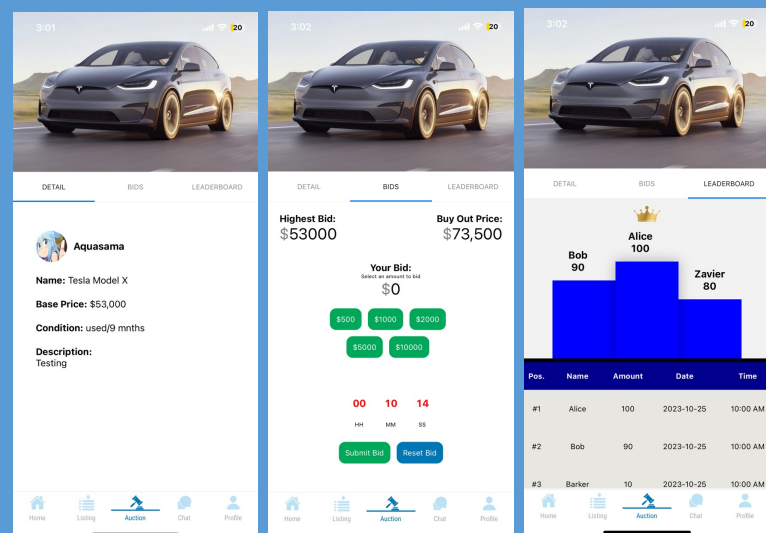
For the development of this app, we decided to use the MERN stack. React Native for the frontend development, Express.js and Node.js for backend development and MongoDB for the database.

Solution



The above diagram shows the whole flow of CLUTCH, with the main feature being the car auction.

Key feature: Auction



Product Description

Bidding Details

Leaderboard

Advantages

Ease of use

Quick glance of the available cars in the convenience of a phone

People could get a car at a lower price through auction

Disadvantages

Large userbase is needed for the proper running of the app

People might sell illegal car mods

People might make a fake account and fake auction to generate interests

Conclusion

Overall, our mobile application, CLUTCH, aims to give users control by offering a platform for direct communication and trading. Tailored for those seeking a prompt liquidation at equitable market values, CLUTCH ensures the precise and efficient handling of all legal documentation and vehicle condition assessments during transactions, therefore benefitting users in the long run.

Future Work

- **Recommendation System (Data Analytics)**
 - To provide personalized and transparent car suggestions based on user behavior and preferences.
- **AR Model of Cars**
 - Allows user to explore the exterior and interior of the vehicles in a virtual space, providing a more immersive experience.